



Environmental Protection Department

Our Mission is to protect, monitor, restore, and regulate Morongo's natural resources, honoring and protecting all life, land, and traditions and enhancing tribal sovereignty. We will promote environmental awareness and environmentally considerate actions by exemplifying environmental stewards, fostering collaborative relationships, expanding education and outreach activities, and continuing to enrich and develop our programs.

Winter Seasonal Photo Contest Winner

Written by: Jessica Southard, Environmental Admin. Assistant



The Morongo Environmental Protection Department would like to congratulate

Julie Flores

for winning 1st place in the Winter Seasonal Photo Contest.

"We are fortunate to work at a location so beautiful. Stop, look around, and admire what's out there"

Julie works for Morongo Administration, Information Technology and received a \$50.00 gift certificate to Best Buy.



Congratulations to *Tom Yang*, Morongo Administration, Information Technology who submitted the Runner-Up photo "*Sunset*".

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Submit your photos for a chance to win a \$50 gift card to a local retailer!

Submissions need to be original photographs taken between April 1 and June 1 within the Reservation or the surrounding San Geronio Pass and can be anything related to the environment. Tribal members, descendants, community members, and employees are all welcome to participate!

Spring Entries are Due June 1st

To submit your photo for the Winter photo contest, upload your pictures at: www.morongonation.org/content/environmental-seasonal-photo-contest Or email photos and a description to: environmental_department@morongo-nsn.gov

If you need assistance uploading your photo or you have any questions about the photo contest, please contact the Environmental Department at 951-755-5128.

3 photos were submitted. Photographers remained anonymous and all employees who had access to a computer were allowed to vote for their favorite photo.

Spring Native Flower Boom

Written by: Jon Castillo, Environmental Technician

Spring is now upon us, and the native plants are blooming. Please don't miss out on this amazing, breath-taking, and once-a-year sight to see. One of the best spots to see this phenomenal sight is at the top of Bog Hill. From this view north, you can see the mixture of spring flowers including the California Poppy (*Eschscholzia californica*), which is our state flower, and bright goldfield flowers (*Lasthenia gracilis*).

In lower Millard, in the area of the old apple orchards, surrounding fields will have areas filled with Owl's clover (*Castilleja exserta*). Look on the mountain sides in the same area and you will see purple Miniature Lupine (*Lupinus bicolor*).

From Deep Canyon to Lion Canyon, you will see Brittle Bush (*Encelia farinosa*) with multiple yellow flowers. This part of the canyon gets so bright yellow, you can see the yellow sections from across from the freeway. Remember to bring your camera, drive safely in the canyons, and look for snakes when walking in the fields.



Potrero Canyon Spring Flowers



Millard Canyon Owl's Clover



Millard Canyon Lupine

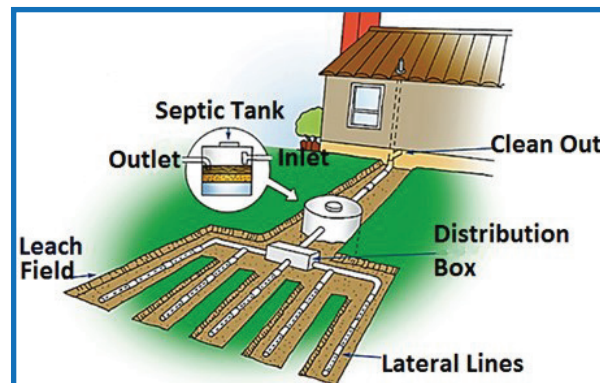


Lion Canyon Brittle Bush

Maintaining Your Septic System

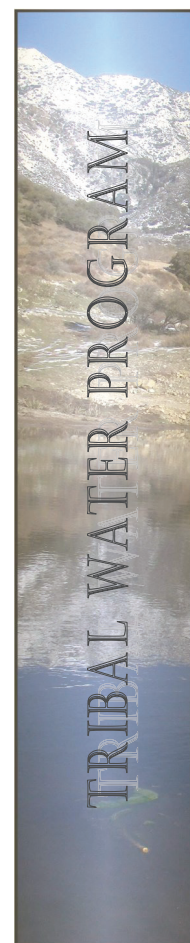
Written by: Kimberly Miller, Environmental Specialist

There are two main systems used to manage the wastewater that comes from buildings: centralized sewer systems and septic systems. Centralized sewer systems have sewer lines that take the wastewater from the building and convey it to a wastewater treatment plant. At Morongo, the Enterprises and the Administration Building are connected to a sewer system that is treated at the Wastewater Treatment Plant. Other buildings and residences rely on septic systems to treat water on-site.



A typical set up is shown in the picture. The water from sinks, showers, washing machines, and toilets runs into the septic tank. In the tank, any solids or oil/grease are separated out. The solids are what need to be pumped periodically. The rest of the liquid flows into the leach field; where it slowly percolates through the soil. The septic system relies on natural processes to filter the water before it returns to the aquifer. This means it is very important that the system is properly maintained in order to keep pollutants out of our groundwater. Failing septic systems can contribute pathogens and excess nutrients to groundwater. These pollutants can cause environmental damage as well as pose a health hazard. There are some very easy do's and don'ts to keep in mind for your septic system. More information can be found on the U.S. Environmental Protection Agency's website www.epa.gov/septicmart.

DO	DON'T
Protect It and Inspect It	
✓ Have system inspected & pumped every 3-5 years by a professional	✗ Wait until there is a problem
Think at the Sink	
✓ Limit the use of a garbage disposal	✗ Pour household chemicals down the sink or flush them
✓ Properly dispose of coffee grounds & food	✗ Rinse coffee grounds down the sink
✓ Put grease in a container and throw away	✗ Pour grease or oil down the sink or toilet
Don't Overload the Commode	
✓ Dispose of trash items in the trash can	✗ Flush non-degradable products (feminine hygiene products, floss, cigarettes, paper towels, pharmaceuticals, etc.)
Shield Your Field	
✓ Determine a proper distance away from your system to plant trees and shrubs	✗ Park or drive on your leach field ✗ Plant trees or shrubs too close to your leach field
Don't Strain Your Drain	
✓ Stagger the use of water generating appliances ✓ Fix leaks and install water efficient products	✗ Concentrate your water use by using the dishwasher, shower, washing machine, and toilet at the same time



What's the Problem with Plastic Bags?

Written by: Dana Morey, Environmental Supervisor



The Problem with Plastic Bags...

First introduced in the 1970's, plastic bags are now used almost everywhere throughout the globe. Nationwide, Americans use 100 billion plastic bags every year. Californians use a staggering 400 plastic bags per second. Plastic bags are convenient, light, flexible yet strong, can be used for a variety of purposes, are cheap to produce, and seemingly free to consumers. Yet, plastic bags are not truly free and can degrade our environment.

Of the 100 billion bags used annually, only 5% of these will be recycled. The remaining 95% will end up as litter or in our landfills. The useful characteristics of plastic bags – light, flexible, and strong – are also the reason they can have harmful effects on our environment. Millions of littered plastic bags clog sewers, cling to fences and trees, and are frequently eaten by animals, particularly marine animals which mistake the floating plastic bags for prey, causing the animals to become sick and even die. Littered plastic bags can take 10-20 years to

decompose in the environment allowing them to cause problems for years. Keep America Beautiful estimates the cost of cleaning up litter in the U.S. is 11.5 billion dollars annually. Granted a lot of items are littered, plastic bags are arguably the most visible and worst littered item and they are capable of being blown long distances because they are so light weight. Alternatively, bags sent to the landfill could take 1,000 years to decompose because landfills lack the necessary elements for decomposition to occur.



How about paper bags?

Paper bags are not much better than plastic bags. Paper bags consume 40% more energy and produce 70% more greenhouse gas emissions than plastic bags. Also, one 15 year old tree is needed to make 700 grocery bags. So Americans would need to cut down 2.1 billion trees every year to replace 100 billion plastic bags with paper! Reusable bags are the best option!

Take Action! – Reduce, Reuse, and Recycle

Recycling alone is not a perfect solution but it is better than putting plastic bags into a landfill. Plastic bags are **100% recyclable**. Not all facilities can handle recycling plastic bags as the bags can clog machinery. The Morongo Recycling Program does accept plastic bags but please package them tightly together to prevent them from becoming windblown litter during pickups. Also, the Plastic Bag and Film Recycling Act (2012) requires stores to have an in-store recycling program which provides customers with an opportunity to recycle their unwanted plastic bags. Your local retailers and grocery stores should have collection bins available for you to drop off and recycle your plastic bags! While you are recycling plastic bags, remember you can also recycle any plastic film. This includes dry cleaning bags, bread bags, water case wrap, produce bags, food storage bags, paper towel packaging wrap, and plastic air pillows. Many households also find creative ways to **reuse** plastic bags in addition to using them for trash liners. Our best option to battle the overwhelming amount of plastic pollution is to **reduce** our use of plastic bags. Bring your **reusable** bag every time you shop. This helps to save resources (plastic is an oil product), save energy, and to keep our environment healthier.

Plastic Bag Bans

Plastic bag bans are becoming more common in cities and counties. Some bans will completely eliminate plastic bag use while others will discourage their use by charging customers 10 cents per bag. California is very close to implementing a statewide ban on plastic bags, charging 10 cents per bag. Recently implementation of the ban was delayed by industries opposed to the ban. As of the time of this article, Californians will be able to vote on the plastic bag ban in the November 2016 election. In the meantime, remember to bring your reusable bag!

Understanding the Clean Air Act

Written by: Pamela Atcitty, Environmental Specialist

Years ago, many cities like Los Angeles had air quality so unhealthy, they were frequently being issued warnings of “Stage 3” smog alerts. Over populated cities were so heavily polluted, kids were not allowed to play outside. Fortunately, those days are coming to an end. Air quality in large cities across the United States, including Los Angeles, have vastly improved from decades ago. The over abundant smog days with poor visibility and major health concerns, prompted the federal and state governments to step in to begin studying and start cleaning up the Nation’s air pollution problem.

The Clean Air Act

The most important action was made in 1970 when Congress created the Environmental Protection Agency (EPA) and passed the Clean Air Act, giving the federal government authority to clean up air pollution in this country. Since then, EPA and states, tribes, local governments, industry, and environmental groups have worked to establish a variety of programs to reduce air pollution levels across America. The Clean Air Act has helped change the way many of us work or do business. In some cases, it has even changed the way we live. Under the Clean Air Act, EPA sets limits on certain air pollutants, including setting limits on how much can be in the air anywhere in the United States. This helps to ensure basic health and environmental protection from air pollution for all Americans. The Clean Air Act also gives EPA the authority to limit emissions of air pollutants coming from sources like chemical plants, utilities, and steel mills. Individual states or tribes may have stronger air pollution laws, but they may not have weaker pollution limits than those set by EPA.

EPA must approve state, tribal, and local agency plans for reducing air pollution. If a plan does not meet the necessary requirements, EPA can issue sanctions against the state and, if necessary, take over enforcing the Clean Air Act in that area. EPA assists state, tribal, and local agencies by providing research, expert studies, engineering designs, and funding to support clean air progress. Since 1970, Congress and the EPA have provided several billion dollars to the states, local agencies, and tribal nations to accomplish this goal.

Tribal Nations’ Role

In its 1990 revision of the Clean Air Act, Congress recognized that Indian Tribes have the authority to implement air pollution control programs. EPA’s Tribal Authority Rule gives Tribes the ability to develop air quality management programs, write rules to reduce air pollution and implement and enforce their rules in Indian Country. While state and local agencies are responsible for all Clean Air Act requirements, Tribes may develop and implement only those parts of the Clean Air Act that are appropriate for their lands. Since February 2000, Morongo has been working with EPA to build their capacity so that they

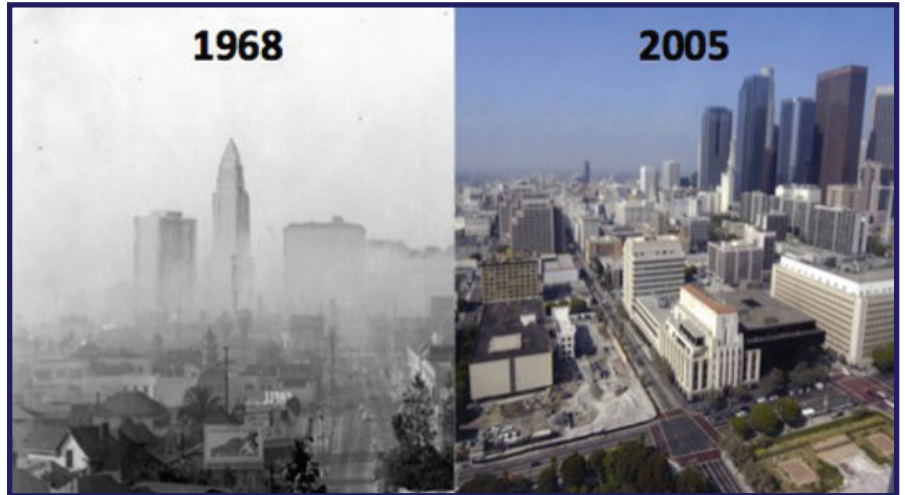
By reducing air pollution, the Clean Air Act has led to significant improvements in human health and the environment in the United States.

Since 1970,

- The six commonly found air pollutants decreased by more than 50%
- Air toxics from large industrial sources have been reduced by nearly 70%
- New cars are more than 90% cleaner and will be even cleaner in the future
- Production of most ozone-depleting chemicals has ceased.

ensure compliance with the Clean Air Act as well as reinforce their sovereignty.

Source: EPA “The Plain English Guide To The Clean Air Act.” EPA-456/K-07-001 (2007).



Los Angeles before and after the EPA created the Clean Air Act in 1970.



Mistletoe Removal Project

Written by: James Payne, Environmental Director

“The people of the Morongo Reservation, past and present have used the Reservation’s forest resources for shelter materials, medicinal and ceremonial purposes, and as a source of many foods (Mike Contreras, [formerly] Morongo Cultural Heritage Program).” This statement is the opening observation in our proposals for funding for Forest Pest Management (FPM). FPM funding has been successfully procured through the Bureau of Indian Affairs and has allowed the Environmental Protection Department to combat the threat to the forested areas known as mistletoe.

Mistletoe (*Phoradendron macrophyllum*) is a native, parasitic plant which has infected the sycamore, alder, oak, cottonwood, and black walnut trees on the reservation. It is spread by birds eating the berries and distributing the seeds in their droppings. The germination of the seed allows the mistletoe’s root-like shoots to enter through the bark and into the branch. From there, it begins to rob the nutrients and water from the tree, thus stressing the tree and making it more susceptible to other diseases which both damage and may kill the host tree.

You may remember our 2011 high school interns Adrienne Martin and Joseph Smith doing their research, work, and community presentation on the mistletoe infestation. They reiterated the significance of the issue and stressed that “the canyon is heavily infested and in time it’s only going to get worse, now is the time to take action and start coming up with a plan to save our native trees.” Following the tribally adopted Forest Management Plan, which outlines both the mistletoe removal and cutting of hardwood, we are taking the appropriate actions.

The most effective treatment in mistletoe eradication is to physically remove it. Pruning the smaller branches about 12 inches back from the infection towards the trunk of the tree removes the mistletoe, and will also help the tree’s formation. Larger, main trunks or branches with an infection will require the mistletoe to be sheared off and then wrapped with black plastic to block out the light that the mistletoe requires for photosynthesis.

Trees that are already dead or too heavily infected (greater than 40% canopy covered with mistletoe) to come back are cut down completely. This reduces the intensification of infection within and between crowns and reduces tree stress. It also has the dual benefits of encouraging the growth of young and new trees that need access to sunlight and water as well as reducing the safety hazard and risk on human health.

The work is being performed with great assistance from the CalFire Oak Glen Conservation Camp. Crews are climbing, cutting, and chipping 2-3 times per week in Millard Canyon and, if funding and timing allows, they will also remove mistletoe in Hathaway Canyon. Environmental staff are routinely working with them, providing direction, hauling debris, identifying tree mortality status, and delivering equipment such as the department’s wood chipper and rolloff bin. Since they have started, you can see a significant change and we are already seeing a healthier stand of trees!

The hardwoods and forested areas are culturally and physically significant. They are part of the ecosystem providing shade, shelter and food for wildlife. The roots, leaves, and fallen branches help reduce storm runoff into streams as well as provide habitat and food for small organisms in and out of the stream. Equally important are the aesthetic qualities and intrinsic values that are part of continued traditions for the people of Morongo. We are working diligently to ensure that this is carried on for future generations so they too may enjoy, respect, and value these natural resources.



Kids Corner - California Black Bear

Written by: Jessica Southard, Administrative Assistant



Hi, I'm a California Black Bear. I usually eat grass, roots, berries & insects. I'll also eat fish, small mammals and even garbage!

Fun Facts

Type: Mammal

Diet: Omnivore

Average life span in the wild: 20 years

Size: 5 to 6 ft long

Weight: 200 to 600 lbs

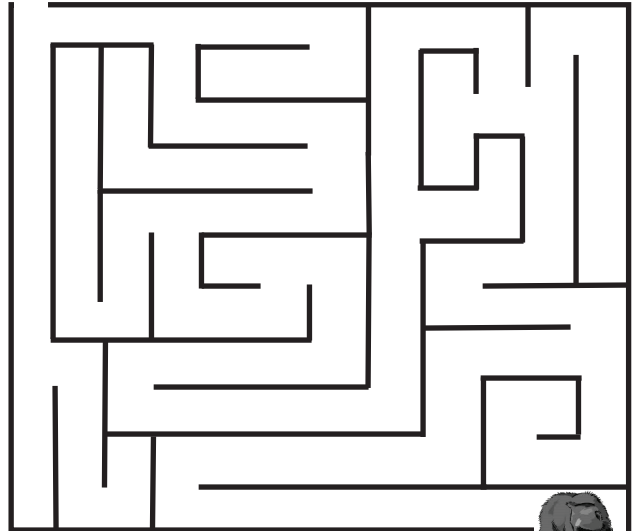
Did you know?

Black bears are not true hibernators. During their winter dormant period, though, they do not eat, drink, urinate, or defecate, but may wake up if disturbed.



Mother Black Bears are very protective of their cubs.

This mother has lost her cub, can you help her find him?



<http://animals.nationalgeographic.com/animals/mammals/black-bear/>



**Morongo Band of Mission Indians
Environmental Protection Department**

Join Us!

**Wednesday,
April 22, 2015**

**10:00 am—3:00 pm
@ Potrero Park**

**Local Environmental
Entities
Games
Activities
Lunch
Raffle Prizes
& Much More**

Upcoming Events

Wednesday, April 22, 2015

10:00am—3:00 pm

Earth Day Event @ Potrero Park

Saturday, May 23, 2015

9:00am—12:00pm

Household Hazardous Wastes drop-off day @ Public Works

Are you receiving our Quarterly Newsletter?

If you would like to receive electronic versions of the Morongo Environmental Protection Department's Quarterly Newsletter and information on other Environmental Events, sign up at

www.morongonation.org/content/environmental-newsletter-email-signup

or email epd@morongo-nsn.gov and request to be added to the list!

Prefer a copy mailed to you, no problem! You can sign up at

www.morongonation.org/content/newsletter or email us at epd@morongo-nsn.gov



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